AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A bone screw [[(1)]] having a longitudinal axis [[(2)]] comprising:

a threaded shaft [[(15)]], which comprises an external thread [[(3)]] with an external diameter D_A, a front threaded end [[(4)]] and a thread profile [[(11)]], wherein the thread profile [[(11)]] has a front threaded flank [[(7)]] which is directed towards the front threaded end [[(4)]], and a rear threaded flank [[(18)]];

a front end [[(4)]]; and

a rear end [[(18)]], the rear end [[(18)]] able to accommodate a tool,

wherein the external thread [[(3)]] at the front end [[(4)]] of the thread comprises a flank piece [[(9)]], which is angled with respect to threaded flanks [[(7, 18)]], so that a tangential cutting edge [[(5)]] is formed thereby at the front end [[(4)]] of the thread.

2. (Currently Amended) A bone screw according to claim 1, wherein flank piece [[(9)]] encloses an angle α of between about 40° and about 110° with the longitudinal axis [[(2)]].

3. (Original) A bone screw according to claim 2, wherein the angle α is between about 85° and about 95°, and more preferably between about 88° and about 91°.

4. (Currently Amended) A bone screw according to ~~claims 1 to 3~~ claim 1, wherein the threaded profile [[(11)]] has a constant profile height H.

5. (Currently Amended) A bone screw according to ~~claims 1 to 4~~ claim 1, wherein the external thread [[(3)]] is configured as a multiple thread, preferably as a double thread.

6. (Currently Amended) A bone screw according to ~~claims 1 to 5~~ claim 1, wherein the external thread [[(3)]] has a thread pitch x of between about 1 mm and about 7 mm, and preferably of between about 1.5 mm and about 4.0 mm.

7. (Currently Amended) A bone screw according to claim 6, wherein the external thread [[(3)]] has n threads and a thread pitch X = nx.

8. (Currently Amended) A bone screw according to ~~claims 1 to 7~~ claim 1, wherein the external diameter D_A of the external thread [[(3)]] is between about 7 and about 14 mm and preferably between about 10 mm and about 14 mm.

9. (Currently Amended) A bone screw according to ~~claims 1 to 8~~ claim 1, wherein the height H of the thread profile is between about 0.5 mm and about 5.0 mm, and more preferably between about 2.5 mm and about 4.5 mm.

10. (Currently Amended) (Currently Amended) A bone screw according to ~~claims 1 to 9~~ claim 1, wherein the thread profile [[(11)]] has a flank angle β between about 5° and about 160°, and more preferably between about 60° and about 90°.

11. (Currently Amended) A bone screw according to ~~claims 1 to 10~~ claim 1, wherein the thread profile [[(11)]] has a variable flank angle β in a cross-sectional area parallel to the longitudinal axis of the bone screw [[(1)]].

12. (Currently Amended) ~~A device with a bone screw according to claims 1 to 11, comprising~~ An assembly comprising:

a bone screw having a front end and a rear end forming a longitudinal axis, wherein the bone screw further includes a threaded shaft, which comprises an external thread with an external diameter D_A, a front threaded end and a thread profile, wherein the thread profile has a front threaded flank which is directed towards the front threaded end, and a rear threaded flank;

a tubular bone blade [[(21)]] with a central borehole which is coaxial with the longitudinal axis [[(2)]] of the bone screw [[(1)]],

wherein the front end [[(8)]] of the bone screw [[(1)]] protrudes coaxially beyond the tubular bone blade [[(21)]] and the bone screw [[(1)]] being rotatable about the longitudinal axis in the central borehole, and

wherein the external thread of the bone screw at the front end of the thread comprises a flank piece, which is angled with respect to threaded flanks, so that a tangential cutting edge is formed thereby at the front end of the thread.